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REMARKS

In response to the Final Office Action mailed on June 16, 2008, Applicant(s) respectfully request(s) reconsideration. Claim(s) 1-16 and 18-31 are now pending in this Application. Claim(s) 1, 12, 14, 26, 27, 28 and 29 are independent claims and the remaining claims are dependent claims. In this Amendment, claim(s) 1, 12, 14, 26, 27, 28 and 29 have been amended. No new matter has been added. Support for the amendments to claims 1, 12, 14, 26, 27, 28 and 29 can be found on page 20 lines 15-24 of Applicants' specification, Note that in addition to the above cited locations in the specification, support for the amendments can be found elsewhere throughout the text and figures of the specification as well as elsewhere throughout the specification.

Applicant(s) believe that the claim(s) as presented are in condition for allowance. A notice to this affect is respectfully requested.

Preliminary Matters

The Applicants thank the Examiner for the courtesy of a telephone interview on August 11, 2008. During the telephone interview, it was discovered that the Examiner and the Applicants continue to differ as to their interpretations of the teachings of U.S. Patent No. 6,507,866 issued to Barchi ("Barchi"). The Applicants contend that the methods taught in Barchi are performed only on received messages (on the "receiving side"), such as received by a receiver-mail server, and are not performed on outbound messages (on the "sending side") transmitted through a originating-mail server, as required by the present claims. The Examiner, on the other hand, contends both Barchi and the Applicants' invention are performed on an "intermediary." Applicants have included further arguments and cites to Barchi that the Applicants believe indicate that Barchi is performed only on the receiving side and cites to Applicants' specification and figures to indicate that Applicants' invention is performed on the

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sending/originating side. This enabled Applicant to better prepare a response in connection with the claims. Applicants have further amended the claims to clarify the distinction between the originating side and receiving side of the email process.

Claim Rejections - 35 USC § 103

Claims 1-16 and 18-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stark et al. (U.S. 2003/0233420) in view of Barchi (U.S. 6,507,866).

As an initial matter, the Office Action does not appear to recognize the distinction between receiving side and the originating side of the email delivery process as described by the Applicants. Applicants describe that distinction as follows:

"Though less pronounced than the aforementioned examples, other deficiencies with conventional techniques used to limit unsolicited messages in a computer network exist as well. Since such techniques are **recipient based** techniques (i.e., are performed at the **message receiving computers**), the computer network itself (i.e., the data communications equipment), each **recipient network service** provider (e.g., **recipient** e-mail server) and each recipient computer system (e.g., the **recipients** personal computer) are all burdened by the processing required to handle the unsolicited e-mail messages.

Conversely, the system of the invention is based in part on the observation of the aforementioned limitations of conventional message limiting techniques and serves to significantly overcome such limitations. To do so, the system of the invention provides a message quota transmission system which is enforced on the sending side of messaging

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systems. That is, the system of the invention enforces message quotas on computer users who originate outbound messages for transmission onto a computer network." (Page 7, lines 3-14) (Emphasis added)

Furthermore, the Barchi reference cited by the Examiner makes a similar distinction by referring to "sending SMTP server," "receiving SMTP server," "received e-mail messages," "incoming e-mail messages," and "originators sending e-mail messages."

Applicants' Fig. 1 delineates the separation between the sending side and receiving with the computer network reference character 130. Applicants' Fig. 3, for example, shows the sending side including Message Quota System separated the outbound message from the receiving side secondary message server 180. This distinction is further evident in the difference between the problem solved by the present invention and a different problem solved by Barchi. Applicants' invention protects a network service provider as follows:

In doing so, the computer network such as the Internet is not subject to abusive spam email messages from computer user who have accounts (i.e., subscribe to network service) with a network service provider that uses the system of the invention. Accordingly, since message use is limit to required use (as imposed by a proper setting of the message limits for a particular originator identity), and not spam or junk message use, the domain associated with the network service provider is somewhat protected from being labeled as a "source of spam" on the computer network. In other words, conventional network service providers can become known sources of spam over time and thus computer users on the Internet might tend to configure their browsers to reject messages from domains associated with those network service providers. However, using the invention, **a network service provider can protect itself from becoming labeled** in this manner since the invention **limits the amount of messages a user can send** from

his or her network service provider. (Page 18 lines 1- 14) (Emphasis added)

In contrast, Barchi teaches an embodiment:

“designed to analyze all incoming e-mail messages and detect high frequency e-mail either originating from a single user or destined to a single user. However, the embodiment can be modified to detect other types of undesired e-mail based on the pattern signature of such e-mail messages. The embodiment **protects the receiving e-mail system not only against malicious users**, but also against such events as routing accidents. Such an accident might occur if a user were to inadvertently configure a routing mechanism that routes prodigious quantities of e-mail to a single recipient in a very short interval of time.” (Column 5, line 59 – column 6, line 3) (Emphasis added)

Additionally, Barchi teaches “Exceeding thresholds or certain ratios will trigger alarms to alert monitoring functions and update lists of known sources and types of undesired e-mail messages for filtering.” (Column 5, lines 51-53) In contrast, Applicants’ invention specifically prevents a service provider from being added to the lists described in Barchi.

The Office Action interjects the concept of an intermediary and interprets the term sending end to mean a terminal point in the email process instead of the originating side of the email process. Applicants’ Fig. 1 shows both a sending side and receiving side. Applicants respectfully submit that neither the term “intermediary” nor “sending end” is used in any of Applicants’ claims.

As to the Office Action’s assertions regarding routers, router accidents, and Applicant’s alleged misinterpretation of both the claimed invention as well as the prior art references, Applicants respectfully submit that again, the Office

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Action does not acknowledge the distinction between the distinction between sending/originating side and the receiving side of the email delivery process and the possible router placement. For example, in one embodiment of the applicants invention:

The remote access server 150 may be, for example, dial-in network access server equipment such as a modem bank that allows computer users of computer systems such as the originator computer system 105 to dial-in to computer user accounts provided by a network service provider for access to the computer network 130.

The authentication server 152 in this example embodiment is a RADIUS (Remote Authentication Dial-in User Services) server which executes or otherwise performs RADIUS authentication and accounting software functions according to techniques defined by Request For Comments 2138 and 2139 (RFC2138 and RFC 2139), the contents and teachings of which are hereby incorporated by reference in their entirety. Generally, when a user of the originator computer system 105 dials-in or otherwise connects to the remote access server 150, the remote access server 150 interacts 170 with the authentication server 152 (e.g., via RADIUS authentication and authorization techniques) to authenticate and authorize access to a computer user account provided by the remote access server 150 for the computer user operating the originator computer system 105.

Contrary to the Office Action's assertion, in this embodiment there is no router on the sending side which could create a problem repairable by Applicants invention.

The above response notwithstanding, in order to expedite this application to allowance, Applicant has amended the claims to more clearly and distinctly define the claimed invention.

Regarding claims 1, 2, 12, 14, 15, and 26-29,

The Office Action asserts:

Stark ...checks the physical IP address and the account to verify that the IP address matches one of the entries in the Informant Stylesheet, and if a match is found, the message is considered authentic, otherwise, rejected; [0047] The Informant Stylesheet defines information about the Informant or sender of the information and its valid transport sources or locations from where it will send its messages, i.e. identity of originator). Stark discloses a method for ...verifying an authenticity of an originator identity

Applicants respectfully submit that Stark does not teach verifying an authenticity of an originator identity because Stark's use of an Informant Stylesheet which resides on the originator computer is not enabling since one of ordinary skill in the art would recognize that the Stylesheet can could easily be spoofed.

Nothing in Stark is enabling as to verifying an authenticity of an originator identity. Any reference used to reject a claim must itself be enabling for the subject matter of the invention alleged to be taught (see In re Wilder, 429 F.2d 447, 166 U.S.P.Q. 545 (C.C.P.A. 1970) and In re Collins, 462 F.2d 538, 174 U.S.P.Q. 333 (C.C.P.A. 1972)). For at least the reasons stated above, claims 1, 2, 12, 14, 15, and 26-29 are patentably distinguishable from Stark in view of Barchi.

Furthermore, Stark does not teach nor suggest "dynamically creating a valid account name and network address pair" as recited in amended claim 1, because Stark does not teach integration with a network service provider. It is unclear what Stark means by a "physical IP address" or how the system of Stark provides any real authentication. Whereas, Applicants' invention, for example in one embodiment, assigns the IP address after a login procedure and then uses

the assigned address to provide the valid account name and network address pair.

The Office Action further asserts:

Barchi disclosed ...performing a selective transmit operation including at least one of

- i) **transmitting the outbound message onto a computer network** if the message transmission result contains a transmit value; and
- ii) preventing transmission of the outbound message onto a computer network if the message transmission result contains a no transmit value (Barchi, col. 8, lines 10-32).

Applicants respectfully submit that Barchi does not teach **transmitting the outbound message** from the originating mail server" as recited in claim 1 because Barchi operates on the receiving side and only triggers alarms in response to thresholds being exceeded.

The Office Action states:

The purpose for authenticating the sender of an email message in Starks is to prevent the use of the email system by malicious users. The purpose for the email usage pattern detection teachings of Barchi is to prevent **malicious users from sending massive quantities of undesired email**. (Emphasis added)

Applicants respectfully submit that the Office Action mischaracterizes the teachings of Barchi. Applicants respectfully submit that it is not possible to prevent malicious users from sending massive quantities of undesired email and that unlike Stark and Barchi, Applicants' invention can prevent these undesired e-mail messages from being transmitted as outbound messages from the originating mail server onto a computer network.

The Office Action states:

Since both references teach acts of preventing unauthorized, malicious use of email systems (Starks, [0047]; Barchi, col. 3, lines 6567), it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate the email usage detection teachings of Barchi into the teachings of Starks in order to make sure that once a user's email is authenticated as coming from an original identity, that the user is not sending out massive amounts of

undesired email, i.e. spam, for the benefit of providing extra protection against users abusing the email system, in order to reduce or eliminate the volume of undesired email messages received by a computer system or server (Barchi, col. 1, lines 10-13).

In addition to the arguments above, Applicants contend that Stark and Barchi are not properly combinable. First, Barchi teaches away from the present invention. Barchi teaches identifying “undesired e-mail messages by receiving e-mail messages, storing fields including at least one field from the header of each received e-mail message and analyzing the stored fields for a least one pattern indicative of undesired e-mail messages.” Barchi at col. 4, lines 58-67. Barchi teaches that received emails contain headers that are created when “a sender-SMTP establishes a two-way transmission channel with a receiver-SMTP.” *Id.* at col. 1, line 26 to col. 2, line 23. Barchi teaches methods that extract information from headers in incoming e-mail messages (i.e., received e-mail messages). See, for e.g., *Id.* at col. 6, line 7-8 (“For example, fields from the 821 header and/or the 822 header may be extracted in the Hunt Mode.”). Accordingly, Barchi teaches operating on received e-mails only after a two-way transmission channel with a receiver-SMTP is established and the headers having the extractable information are created.

The present invention, on the other hand, operates on outbound messages. The present invention, as a whole, has the benefit of not having to open up two-way transmissions to those recipients that exceed a message limit associated with the originator identity. Transmission only occurs to those recipients that do not exceed the message limit.

Second, changing Barchi to operate on the sending side would destroy some of the purpose and functionality of Barchi. Barchi teaches protecting “the receiving e-mail system not only against malicious users, but also against such events as routing accidents.” *Id.* at col. 5, line 64 to col. 6, line 3. Barchi can only protect against routing accidents if the mechanism is employed at the receiving side, after emails have been routed (i.e., transmitted). The present

invention, although providing benefits absent in Barchi, does not provide protection against routing accidents. This is because the present invention operates at the sending end, before emails are transmitted or routed. The present invention can reduce the number of emails routed by checking message limits associated with an originator identity and only routing those messages that are under the limit. However, once an email is transmitted in accordance with the present invention, any routing accidents can only be dealt with at the receiving end.

Attempting to operate the methods in Barchi at the sending end would eliminate the ability of Barchi to protect against routing accidents, effectively destroying at least some of the purpose of Barchi. One of ordinary skill in the art at the time of the present invention would have no motivation to combine Barchi with any art (e.g., Stark) if the resulting combination would destroy some or all of the benefits of Barchi.

Barchi also teaches detecting large numbers of e-mail messages sent to a single recipient. *Id.* at col. 7, lines 14-16 ("For example, for a list maintained for purposes of identifying undesired use in the form of many originators sending e-mail messages to a single recipient."). See also, *Id.* FIG. 6 and accompanying text ("The logic shown in FIG. 6 checks for whether the number of e-mail messages to a single recipient has exceeded predetermined threshold."). If Barchi is to be capable of counting all originators sending e-mail to a particular recipient, then Barchi must be operating at the recipient. If Barchi were moved to the sending side, then Barchi would only see messages intended to be sent to the particular recipient that originated at the sending-side server. Since it is well known in the art that there exist many sending-side email servers, Barchi, operating on a sending-side server, would only see a small fraction of the e-mails sent to the particular recipient, again defeating one of the purposes of Barchi.

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For at least these reasons, claim 1 and the claims dependent therefrom are patentably distinguishable over Stark in view of Barchi.

For analogous reasons, claims 12, 14, 26, 27 and 28-29 and the claims dependent therefrom are patentable over Stark in view of Barchi.

Regarding claims 4 and 17, the Office Action asserts:

Stark and Barchi disclosed the limitations of obtaining the originator identity includes the step of **querying a login database containing mappings of originator addresses to originator identities based on the originator address obtained in the step of obtaining an originator address**

Applicants submit that checking the “physical” IP address on some Informant Stylesheet is not enabling as an authenticity check or equivalent to querying a login database since no login is required by Stark. Applicants submit, that neither Stark nor Barchi teach or suggest the limitation “querying a login database containing mappings of originator addresses to originator identities based on the originator address obtained in the step of obtaining an originator address.” Stark uses a non-enabling Informant Stylesheet and requires no login procedure from the originator and Barchi is on receiving side so there is no login connection to the originator.

The Office Action asserts:

Regarding claims 9, 10, 22 and 23 Stark and Barchi disclosed the limitations... of performing a selective transmit operation.

As described above, Applicants respectfully submit Barchi does not teach **transmitting the outbound message**, therefore Barchi cannot teach “performing a selective transmit operation.”

The Office Action asserts:

Regarding claims 11 and 24, Stark and Barchi disclosed the limitations... recording authentication information in a **login database**....

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Applicants respectfully submit Stark is not performing “**recording authentication information in a login database**” for similar reasons described above in conjunction with claim 4.

Regarding claims 24 and 25, The Office Action asserts:

Barchi disclosed ...the port redirector forwards the outbound message to the quota server (Barchi, col. 8, lines 1-45).

Applicants respectfully submit, that the Office Action has not identified which reference teaches the port redirector recited in claim 24 and further that Barchi is completely silent on “a port redirector.”

Conclusion

Applicants contend that it would not have been obvious to one of ordinary skill in the art at the time of the present invention to combine Barchi with Stark as suggested by the Examiner and that neither Barchi nor Stark teach all of the limitations of Applicants' claims. The Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. If the Examiner believes that a telephone conversation with the Applicants' representative would facilitate prosecution of this application in any way, the Examiner is cordially invited to telephone the undersigned at (508) 616-9660.

Applicant(s) hereby petition(s) for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-3735.

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If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 616-9660, in Westborough, Massachusetts.

Respectfully submitted,

/Barry Gaiman/
Barry Gaiman, Esq.
Attorney for Applicant(s)
Registration No.: 42,562
Chapin Intellectual Property Law, LLC
Westborough Office Park
1700 West Park Drive, Suite 280
Westborough, Massachusetts 01581
Telephone: (508) 616-9660
Facsimile: (508) 616-9661

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